STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

April 5, 2004

Certified Mail No. 7000 1670 0013 8128 5351

Mr. Alan L. Prouty
Director, Environmental and Regulatory Affairs
J.R. Simplot Co.
P.O. Box 27
Boise, ID 83707-0027

RE: Facility ID No. 077-00006, J.R. Simplot Co., Pocatello
Final Tier I Operating Permit

Dear Mr. Prouty:

The Department of Environmental Quality (DEQ) is issuing modified Tier I Operating Permit No. T1-9507-114-1 to the J.R. Simplot Co. for their Pocatello facility in accordance with IDAPA 58.01.01.300 – 386 *Rules for the Control of Air Pollution in Idaho*. The enclosed permit is effective immediately and is based on the information contained in Petition for a Contested Case Proceeding, docket No. 0101-03-07, filed by the J.R. Simplot Company (Simplot) on January 28, 2003

Tiffany Floyd of the Pocatello Regional Office will contact you regarding a meeting to discuss the permit terms and requirements. DEQ recommends the following representatives attend this meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of the decision. However, prior to filing a petition for a contested case, DEQ encourages you to contact Pat Nair at (208) 373-0502 or pnair@deq.state.id.us to discuss any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator
Air Quality Division

MB/BR/sd Permit No. T1-9507-114-1

Enclosures

c: Tiffany Floyd, Pocatello Regional Office
Laurie Kral, EPA Region 10

AIR QUALITY **TIER I OPERATING PERMIT** **State of Idaho** **Department of Environmental Quality**	**PERMIT NO.:** T1-9507-114-1 **FACILITY ID NO.:** 077-00006 **AQCR:** 061 **CLASS:** A **SIC:** 2874 **ZONE:** 12 **UTM COORDINATE (km):** 375.6, 4751.6	

1. **PERMITTEE** J.R. Simplot Co. - Don Siding Plant			
2. **PROJECT** Tier I Operating Permit			
3. **MAILING ADDRESS** P.O. Box 912	**CITY** Pocatello	**STATE** ID	**ZIP** 83204
4. **FACILITY CONTACT** Leon C. Pruett	**TITLE** Environmental, Safety, and Health Manager	**TELEPHONE** (208) 234-5370	
5. **RESPONSIBLE OFFICIAL** Delbert Butler	**TITLE** Plant Manager	**TELEPHONE** (208) 234-5410	
6. **EXACT PLANT LOCATION** Section 18 R-34-E, T-6-S; 5½ Section 7 R-34-E T-6-S		**COUNTY** Power	
7. **GENERAL NATURE OF BUSINESS and KINDS OF PRODUCTS** Manufacture of nitrogen, phosphate, and sulfate commercial products			

8. **PERMIT AUTHORITY**

This Tier I operating permit is issued pursuant to Idaho Code §39-115 and the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.300 - 386. The permittee shall comply with the terms and conditions of this permit.

This permit incorporates all applicable terms and conditions of prior air quality permits issued by the Department of Environmental Quality (DEQ) for the permitted source, unless the permittee emits toxic pollutants subject to state-only requirements pursuant to IDAPA 58.01.01.210, and the permittee elects not to incorporate those terms and conditions into this operating permit.

The effective date of this permit is the date of signature by DEQ on the cover page

C. STEPHEN ALLRED. DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: **April 5, 2004**

DATE EXPIRES: **December 24, 2007**

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AQCR	Air Quality Control Region
ASTM	American Society of Testing and Materials
CAA	Clean Air Act
CEMS	continuous emissions monitoring system
Ci/yr	Curies per year
CFR	Code of Federal Regulations
CO	carbon monoxide
CTM	conditional test method
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
gr/dscf	grains per dry standard cubic foot
HPB&W	Babcock & Wilcox boiler - Model No. FM 106-97
H_2SO_4	sulfuric acid
HNO_3	nitric acid
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal units
lb/MMscf	pounds per million standard cubic feet
lb/T	pounds per ton
MACT	maximum available control technology
MMBtu/hr	million British thermal units per hour
MMcf/day	million cubic feet per day
MMscf/hr	million standard cubic feet per hour
MMscf/yr	million standard cubic feet per year
NH_3	ammonia
NO_2	nitrogen oxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PTC	permit to construct
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_3	sulfur trioxide
SPA	superphosphoric acid
TSP	triple super phosphate
T/d	tons per day
T/yr	tons per year
UTM	Universal Transverse Mercator
U.S.C.	United States Code
VOC	volatile organic compound

1. TIER I OPERATING PERMIT SCOPE

PURPOSE

1.1 This Tier I operating permit establishes facility-wide requirements in accordance with the *Rules for the Control of Air Pollution in Idaho.*

1.2 The Tier I operating permit incorporates the requirements in the following permits and consent order:

- Granulation No. 3 Plant Upgrade, PTC No. 077-00006, issued December 12, 2001.
- The 300 Sulfuric Acid Plant Restoration Project, PTC No. 077-00006, issued June 15, 2001.
- Boiler Replacement, PTC No. 077-00006, issued September 20, 2000.
- Tier II Permit No. 077-00006, issued December 3, 1999, expired June 29, 2000.
- Defluorination Project - Granulation No. 3 Plant, PTC No. 077-00006, issued November 12, 1999.
- East Dry Bulk Station - Granulation No. 3 Loadout, PTC No. 077-00006, issued September 13, 1995.
- Babcock and Wilcox Boiler, PTC No. 077-00006, issued June 16, 1995.
- Consent Order, issued August 9, 2001.

2. FACILITY-WIDE CONDITIONS

The following table contains a summary of requirements that apply generally to emissions units at the facility.

Table 2.1 SUMMARY OF FACILITY-WIDE REQUIREMENTS

Permit Conditions	Parameter	Permit Limit/ Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
2.1	Fugitive dust	Reasonable control	IDAPA 58.01.01.650-651	2.2, 2.3, 2.4, 2.11
2.5	Odors	Rules for Control of Odors	IDAPA 58.01.01.775-776	2.6, 2.11
2.7	Visible emissions	20% opacity for no more than three minutes in any 60-minute period	IDAPA 58.01.01.625	2.8, 2.11
2.9	Excess emissions	Compliance with IDAPA 58.01.01.130-136	IDAPA 58.01.01.130-136	2.9-2.9.5, 2.11
2.12	Open burning	Compliance with IDAPA 58.01.01.600-616	IDAPA 58.01.01.600-616	2.11
2.13	Renovation and demolition	Compliance with 40 CFR 61, Subpart M	40 CFR 61, Subpart M	2.11
2.14	Chemical accident prevention	Compliance with 40 CFR 68	40 CFR 68	2.11
2.15	Air quality standards	EPA reference test methods	IDAPA 58.01.01.157	2.11, 2.16
2.16, 2.17	Criteria air pollutants, NH_3, opacity	Compliance testing	IDAPA 58.01.01.157	2.10, 2.11, 2.15
2.18	Fuel sulfur content limit	No. 1 fuel - 0.3% or less; No. 2 fuel - 0.5% or less	IDAPA 58.01.01.728	2.11, 2.19
2.20	Recycling and emissions reduction	Reduce emissions of Class I and Class II refrigerants in accordance with 40 CFR 82, Subpart F	40 CFR 82, Subpart F	2.11
2.21	Fuel-burning equipment	Compliance with IDAPA 58.01.01.676-677	IDAPA 58.01.01.676	2.11
2.23	Special studies	Maintain records of material flow; Monitor ambient fluoride in vegetation used for feed and forage	Tier II Permit No. 077-00006	2.11, 2.24

Fugitive Dust

2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650-651, 5/1/94]

2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

2.4 The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each monthly fugitive emission inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Odors

2.5 No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

[IDAPA 58.01.01.775-776, 5/1/94]

2.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07 (state-only), 5/1/94]

Visible Emissions

2.7 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating no more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason(s) for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 5/1/94]

2.8 In addition to the specific requirements in Permit Conditions 15.11, 15.16, 16.12, and 17.9, the permittee shall conduct a monthly facility-wide inspection of potential point sources of visible emissions during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation for each potential point source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report

the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each monthly visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Excess Emissions

2.9 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 130-136 shall govern in the event of conflicts between the subsections of Permit Condition 2.9 and the regulations of IDAPA 58.01.01.130-136.

2.9.1 The person responsible for or in charge of a facility during an excess emissions event shall, with all practicable speed, initiate and complete appropriate and reasonable action to correct the conditions causing such excess emissions event; to reduce the frequency of occurrence of such events; to minimize the amount by which the emission standard is exceeded; and shall, as provided below or upon request of DEQ, submit a full report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken.

[IDAPA 58.01.01.132, 4/5/00]

2.9.2 In all cases where startup, shutdown, or scheduled maintenance of any equipment or emission unit is expected to result or results in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.133.01(a) through (d), including, but not limited to the following:

[IDAPA 58.01.01.133, 4/5/00]

2.9.2.1 A prohibition of any scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory and/or a Wood Stove Curtailment Advisory have/has been declared by DEQ.

[IDAPA 58.01.01.133.01.a, 3/20/97]

2.9.2.2 Notifying DEQ of the excess emissions event as soon as reasonably possible, but no later than two hours prior to the start of the event unless the owner or operator demonstrates to DEQ's satisfaction that a shorter advanced notice was necessary.

[IDAPA 58.01.01.133.01.b, 4/5/00]

2.9.2.3 The owner or operator of a source of excess emissions shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135-136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

[IDAPA 58.01.01.133.01.c, 3/20/97]

2.9.3 In all cases where upset or breakdown of equipment or an emissions unit, or the initiation of safety measures, results or may result in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.134.01(a) and (b) and the following:

[IDAPA 58.01.01.134, 4/5/00]

2.9.3.1 For all equipment or emissions units from which excess emissions result during upset or breakdown conditions, or for other situations that may necessitate the implementation of safety measures which cause excess emissions, the facility owner or operator shall comply with the following:

[IDAPA 58.01.01.134.02, 4/5/00]

The owner or operator shall immediately undertake all appropriate measures to reduce and, to the extent possible, eliminate excess emissions resulting from the event and to minimize the impact of such excess emissions on the ambient air quality and public health.

[IDAPA 58.01.01.134.02.a, 4/5/00]

The owner or operator shall notify DEQ of any upset, breakdown, or safety event that results in excess emissions. Such notification shall identify the time, specific location, equipment or emissions unit involved, and (to the extent known) the cause(s) of the occurrence. The notification shall be given as soon as reasonably possible, but no later than 24 hours after the event, unless the owner or operator demonstrates to DEQ's satisfaction that the longer reporting period was necessary.

[IDAPA 58.01.01.134.02.b, 4/5/00]

The owner or operator shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5. and IDAPA 58.01.01.135-136 for each excess emissions event caused by an upset, breakdown, or safety measure.

[IDAPA 58.01.01.134.02.c, 3/20/97]

2.9.3.2 During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, DEQ may require the owner or operator to immediately reduce or cease operation of the equipment or emissions unit causing the period until such time as the condition causing the excess has been corrected or brought under control. Such action by DEQ shall be taken upon consideration of the factors listed in IDAPA 58.01.01.134.03 and after consultation with the facility owner or operator.

[IDAPA 58.01.01.134.03, 4/5/00]

2.9.4 A written report for each excess emissions event shall be submitted to DEQ by the owner or operator no later than 15 days after the beginning of such an event. Each report shall contain the information specified in IDAPA 58.01.01.135.02.

[IDAPA 58.01.01.135.01, 02, 3/20/97]

2.9.5 The owner or operator shall maintain excess emissions records at the facility for the most recent five-calendar-year period. The records shall be made available to DEQ representatives upon request. The excess emissions records shall include the information requested by IDAPA 58.01.01.136.03(a) and (b) as summarized in the following:

[IDAPA 58.01.01.136.01, 02, 3/20/97; IDAPA 58.01.01.136.03, 4/5/00]

2.9.5.1 An excess emissions record book for each emissions unit or piece of equipment containing copies of all reports that have been submitted to DEQ pursuant to IDAPA 58.01.01.135 for the particular emissions unit or equipment.

[IDAPA 58.01.01.136.03.a, 4/5/00]

2.9.5.2 Copies of all startup, shutdown, and scheduled maintenance procedures and upset, breakdown, safety preventative maintenance plans that have been developed by the owner or operator in accordance with IDAPA 58.01.01.133-134, and facility records as necessary to demonstrate compliance with such procedures and plans.

[IDAPA 58.01.01.136.03.b, 3/20/97; IDAPA 58.01.01.130-136, 4/5/00 (state-only; federally enforceable upon approval into SIP); IDAPA 58.01.01.322.08.b, 3/23/98]

Reports and Certifications

2.10 All periodic reports and certifications required by this permit shall be submitted to DEQ within 30 days of the end of each specified reporting period. Excess emissions reports and notifications shall be submitted in accordance with IDAPA 58.01.01.130-136. Reports, certifications, and notifications shall be submitted to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, Suite 300
Pocatello, ID 83201
Phone: (208) 236-6160
Fax: (208) 236-6168

The periodic compliance certification required by General Provision 21 shall also be submitted within 30 days of the end of the specified reporting period to the following:

U.S. EPA Region 10
Air Operating Permits, OAQ-107
1200 Sixth Ave.
Seattle, WA 98101

[IDAPA 58.01.01.322.08, 11, 4/5/00]

Monitoring and Record-keeping

2.11 The permittee shall maintain sufficient record keeping to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.322.07, 5/1/94]

Open Burning

2.12 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning*.

[IDAPA 58.01.01.600-616, 5/1/94]

Renovation/Demolition

2.13 The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

[40 CFR 61, Subpart M]

Regulated Substances for Accidental Release Prevention

2.14 An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions in 40 CFR Part 68 no later than the latest of the following dates:

Three years after the date on which a regulated substance present above a threshold quantity is first listed in 40 CFR 68.130.

The date on which a regulated substance is first present above a threshold quantity in a process.

[40 CFR 68.10(a)]

Test Methods

2.15 If testing is required, the permittee shall use the test methods described in Table 2.2 to measure the pollutant emissions.

Table 2.2 TEST METHODS

Facility	SO_2	H_2SO_4	NO_x	CO	PM	PM_{10}	F	NH_3	TRS	O_2	Opacity
300 Sulfuric	8	8	7e		5 & 202	5 and 202, or 201A[3] and 202		CTM 027[1]		3a & 19	9
400 Sulfuric	8	8	7e			5 and 202, or 201A[3] and 202					9
HPB&W Boiler										3a & 19	
Granulation I					5 & 202	5 and 202, or 201A[3] and 202	13B	CTM 027			9
Granulation II					5 & 202	5 and 202, or 201A[3] and 202	13B	CTM 027			9
Granulation III					5 & 202	5 and 202	13B				9
Reclaim Cooling Tower					5 & 202	5 and 202	13B				9
Superphos Acid			7e	10			13B				9
Phosphoric Acid					5 & 202	5 and 202, or 201A[3] and 202	13B		16a		9
Ammonium Sulfate					5 & 202	5 and 202, or 201A[3] and 202					9

[2]Conditional test method (CTM-027)

[3]201A cannot be used on stacks with water droplets present.

Compliance Testing

2.16 If testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine the testing does not satisfy the testing requirements. Therefore, prior to conducting any compliance test, the permittee is strongly encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

The type of method to be used

- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

Within 30 days following the date on which a compliance test required by this permit is concluded, the permittee shall submit to DEQ a report for the respective test. The compliance test report shall include all process operating data collected during the test period including a brief explanation of how the process data was measured as well as the test results, raw test data, and associated documentation, including any approved test protocol.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, Suite 300
Pocatello, ID 83201
Phone: (208) 236-6160
Fax: (208) 236-6168

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

2.17 By December 15 of each year, the permittee shall submit to DEQ, a tentative schedule of the source testing to be performed during the following calendar year.

[Tier II Permit No. 077-00006, 12/3/99]

Sulfur Content

2.18 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

2.18.1 ASTM Grade 1 fuel oil - 0.3% by weight.

2.18.2 ASTM Grade 2 fuel oil - 0.5% by weight.

[IDAPA 58.01.01.728, 5/1/94]

2.19 The permittee shall maintain documentation of the actual sulfur content in percent by weight for each shipment of distillate fuel oil received.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Recycling and Emissions Reduction

2.20 The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

Fuel-Burning Equipment

2.21 The permittee shall not discharge PM to the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

Documentation for Exemptions under IDAPA 58.01.01.200

2.22 Unless the source is subject to, and the owner or operator complies with, IDAPA 58.01.01.385, the owner or operator of the source, except for those sources listed in IDAPA 58.01.01.222.02.a. through 222.02.g., shall maintain documentation on site that shall identify the exemption determined to identify the source and verify that the source qualifies for the identified exemption. The records shall be kept for a period of time not less than five years from the date the exemption determination has been made or for the life of the source for which the exemption has been determined to apply, whichever is greater, or until such time as a permit to construct or an operating permit is issued which covers the operation of the source. The owner or operator shall submit the documentation to DEQ upon request.

[IDAPA 58.01.01.220.02, 4/5/00; IDAPA 58.01.01.322.01, 3/19/99]

Special Studies

2.23 The permittee shall obtain and keep for at least five years the following process and equipment information:

2.23.1 Reserved.

2.23.2 Ambient fluoride in vegetation used for feed and forage shall be monitored outside the Don Siding Complex at 15 different locations during the growing season. The permittee shall comply with the Air Ambient Monitoring Plan that was required to be developed in the Tier II permit issued December 3, 1999. The Air Ambient Monitoring Plan shall be kept on site and shall be made available to DEQ representatives upon request.

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.01, 3/19/99; IDAPA 58.01.01.322.07, 5/1/94]

Reporting Requirements for Ambient Fluoride Monitoring

2.24 The ambient fluoride in vegetation used for feed and forage monitoring results shall be submitted in an annual report to DEQ no later than December 31 of the calendar year in which the samples were collected. The results shall be reported in parts per million. The permittee shall maintain all fluoride in vegetation monitoring data collected in the Don Siding area for not less than five years.

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.07, 5/1/94]

3. EMISSIONS UNIT GROUP 1: RESERVED

4. EMISSIONS UNIT GROUP 2: AMMONIUM SULFATE PLANT

Summary Description

The following is a narrative description of the ammonium sulfate plant regulated in this Tier I operating permit. This description is for informational purposes only.

This process involves making crystalline ammonium sulfate and transferring it to storage and loadout. Recycled Ammsox® scrubber liquor is transferred to the reactor where sulfuric acid and ammonia are added. The product, crystallized ammonium sulfate, is formed in the reactor and removed from the mother liquor by a centrifuge and transferred to a dryer and cooler. Product is transferred from the cooler to the product belt conveyors, which dump to the product stockpile. Product is then transferred by loader from the product stockpile to the reclaim hopper, which feeds a bucket elevator. The bucket elevator chute feeds product into trucks.

Table 4.1 describes the devices used to control emissions from the ammonium sulfate plant.

Table 4.1 EMISSIONS UNITS, CONTROL DEVICES, AND POINTS

Emissions Unit(s) / Process(es)	Source ID	Emissions Control Device	Emission Point
Dryer	500	Dryer Venturi scrubber	Dryer stack
Cooler	501	Cooler Venturi scrubber	Cooler stack
Cooler elevator	504.1		
Reactor (crystallizer)	503	Barometric condenser	Vacuum pump vent
Product stockpile and associated materials transfer to and from product stockpile	550, 551, 552	Building enclosure	Fugitive
Bucket elevator material transfer	553, 554	Wind protection	

Table 4.2 contains only a summary of the requirements that apply to the ammonium sulfate plant. Specific permit requirements are listed below Table 4.2.

Table 4.2 SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
4.1	PM	2.44 lb/hr, 10.68 T/yr Process weight rate	Tier II Permit No. 077-00006 IDAPA 58.01.01.701	4.9, 4.10, 4.11, 4.15, 4.16, 4.17
4.3	PM_{10}	2.0 lb/hr, 8.76 T/yr	Tier II Permit No. 077-00006	4.9, 4.10, 4.11, 4.15, 4.16, 4.17
4.4	SO_2	0.0007 lb/hr, 0.003 T/yr	Tier II Permit No. 077-00006	4.10, 4.12
4.5	CO	0.07 lb/hr, 0.3 T/yr		
4.6	NO_x	0.25 lb/hr, 1.1 T/yr		
4.7	Fugitive PM	2.52 lb/hr, 11.04 T/yr	Tier II Permit No. 077-00006	4.8, 4.13
4.8	Fugitive PM_{10}	0.90 lb/hr, 3.92 T/yr	Tier II Permit No. 077-00006	4.8, 4.14

Permit Limits / Standard Summary

4.1 The total PM emissions from the combined dryer and cooler stacks shall not exceed 2.44 lb/hr and 10.68 T/yr. The ton-per-year rate shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emissions rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/03/99]

4.2 Based on the process weight rate equation the limit is 12.5 lb/hr. Because condition 4.1 is more stringent, compliance with Permit Condition 4.1 shall be deemed compliance with Permit Condition 4.2.

[IDAPA 58.01.01.701, 4/5/00]

4.3 The total PM_{10} emissions from the combined dryer and cooler stacks shall not exceed 2.0 lb/hr and 8.76 T/yr. The ton-per-year rate shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/03/99]

4.4 The total SO_2 emissions from the combined dryer and cooler stacks shall not exceed 0.0007 lb/hr and 0.003 T/yr.

[Tier II Permit No. 077-00006, 12/03/99]

4.5 The total CO emissions from the combined dryer and cooler stacks shall not exceed 0.07 lb/hr and 0.3 T/yr.

[Tier II Permit No. 077-00006, 12/03/99]

4.6 The total NO_X emissions from the combined dryer and cooler stacks shall not exceed 0.25 lb/hr and 1.1 T/yr.

[Tier II Permit No. 077-00006, 12/03/99]

4.7 Fugitive particulate emissions from this process shall not exceed 2.52 lb/hr and 11.04 T/yr.

[Tier II Permit No. 077-00006, 12/03/99]

4.8 Fugitive PM_{10} emissions from this process shall not exceed 0.90 lb/hr and 3.92 T/yr.

[Tier II Permit No. 077-00006, 12/03/99]

Operating Requirements

4.9 Maintenance to the corresponding scrubber and process shall be performed if visible emissions from one of the stacks exceed 15% opacity.

[Tier II Permit No. 077-00006, 12/03/99; IDAPA 58.01.01.322.01, 3/19/99]

4.10 Prior to December 24, 2003, the permittee shall develop an O&M manual for each wet scrubber system which describes the procedures that will be followed to comply with Permit Conditions 4.1, and 4.3 through 4.5. The O&M manual shall be developed based on manufacturer specifications and the compliance test data obtained in Permit Condition 4.11. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request. The permittee shall operate each scrubber system in accordance with the O&M manual.

[IDAPA 58.01.01.322.01, 3/19/99]

Compliance Tests

4.11 The permittee shall conduct compliance tests within 12 months of, or 12 months prior to, December 24, 2002 to demonstrate compliance with the PM and PM_{10} hourly emissions limits in Permit Conditions 4.1 and 4.3. After the first compliance test, the permittee shall conduct a compliance test once per annum to demonstrate compliance with hourly PM and PM_{10} emissions limits in Permit Conditions 4.1 and 4.3.

During calendar years 2003, 2004, and 2005, compliance with the PM_{10} emissions limit in Permit Condition 4.3 shall be determined by conducting a Method 5 performance test. The PM_{10} fraction of the PM emission rate measured during the test shall be determined by multiplying the PM emission rate by a 0.82 conversion factor.

During calendar years 2004 and 2005, Method 5 and 202 performance tests shall be conducted in addition to the Method 5 test. All performance testing shall be conducted in accordance with Permit Condition 2.16.

No later than September 30, 2005, Simplot shall submit a permit application to revise the PM_{10} emissions limits to reflect the results of the Method 5 and 202 performance tests. The permit application shall contain justification for each emission limit proposed. Once DEQ issues a permit with revised PM_{10} emissions limits, compliance with Permit Condition 4.3 shall be determined by source testing using Methods 5 and 202.

4.11.1 The permittee shall record the ammonium sulfate plant production rate, the pressure drop across each scrubber, and the flow rate of the scrubber liquid to each scrubber during source tests.

4.11.2 The permittee shall conduct a visible emissions evaluation during each compliance test. The visible emissions evaluation shall be conducted in accordance with the procedures contained in IDAPA 58.01.01.625.

[IDAPA 58.01.01.322.06, 07, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

Monitoring and Recordkeeping Requirements

4.12 To demonstrate compliance with emissions limits in Permit Conditions 4.4 through 4.6, the permittee shall continuously monitor the amount of natural gas fired in the dryer. On a monthly basis, the permittee shall record the natural gas consumption for the previous month and for the previous rolling 12-month period.

[IDAPA 58.01.01.322.01, 3/19/99; IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

4.12.1 The permittee shall monitor and record the hours of operation of the dryer on a monthly basis.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

4.12.2 The permittee shall calculate the emissions of SO_2, CO, and NO_x from the dryer on a monthly basis using AP-42 Section 1.4 (3/98) emission factors, or a DEQ-approved alternative.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

4.13 The permittee shall demonstrate compliance with the fugitive PM emission limits in Permit Condition 4.6 using the method specified in SIP inventory, which can be found in Simplot's June 29, 2000 Tier I/II application, Appendix D.

[IDAPA 58.01.01.322.06, 5/1/94]

4.14 The permittee shall demonstrate compliance with the fugitive PM_{10} emission limits in Permit Condition 4.7 using the method specified in SIP inventory, which can be found in Simplot's June 29, 2000 Tier I/II application, Appendix D.

[IDAPA 58.01.01.322.06, 5/1/94]

4.15 The permittee shall monitor the fluid flow rate to each scrubber. The flow rate shall be recorded once per 24-hour period in gallons per minute (gpm).

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.06, 07, 5/1/94]

4.16 The permittee shall monitor the pressure drop across each scrubber. The pressure drop shall be recorded once per 24-hour period as inches of water column.

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.06, 07, 5/1/94]

4.17 The permittee shall maintain an emissions control equipment maintenance log. This log shall be made available to DEQ representatives upon on request.

[Tier II Permit No. 077-00006, 12/3/99]

5. EMISSIONS UNIT GROUP 3: HPB&W BOILER

Summary Description

The following is a narrative description of the Babcock & Wilcox boiler (HPB&W) regulated in this Tier I operating permit. This description is for informational purposes only.

The HPB&W boiler, Model No. FM 106-97, is a natural gas-fired boiler equipped with a $LoNO_x^{®}$ burner. It has a steam capacity of 120,000 lb of steam per hour and heat input rating of 175,000,000 Btu/hr. The boiler is used to maintain the steam needs of the facility.

Table 5.1 specifies the emissions point related to the emissions unit.

Table 5.1 EMISSIONS UNIT AND POINT

Source ID	Emissions Unit	Emissions Control Device	Emissions Point
1000.0	HPB&W boiler	N/A	Boiler stack

Table 5.2 contains only a summary of the requirements that apply to the HPB&W boiler. Specific permit requirements are listed below Table 5.2.

Table 5.2 SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
5.1	PM/PM_{10}	1.33 lb/hr, 5.83 T/yr	PTC No. 077-00006	5.10 to 5.12, 5.19, 5.20
5.2	SO_2	0.11 lb/hr, 0.46 T/yr	PTC No. 077-00006	5.10 to 5.12, 5.20
5.3	NO_x	7.00 lb/hr, 30.7 T/yr	PTC No. 077-00006	5.10 to 5.23
5.4	NO_x	0.04 lb/MMBtu	PTC No. 077-00006	5.10 to 5.23
		0.10 lb/MMBtu	40 CFR 60.44b(a)(1)	
5.5	VOC	0.96 lb/hr, 4.22 T/yr	PTC No. 077-00006	5.10 to 5.12, 5.19, 5.20
5.6	CO	14.0 lb/hr, 61.3 T/yr	PTC No. 077-00006	5.10 to 5.12, 5.19, 5.20
5.7	PM	0.015 gr/dscf corrected to 3% oxygen	IDAPA 58.01.01.676; PTC No. 077-00006,	5.10, 5.11
5.10	Fuel usage	0.175 MMcf/hr, 1,533 MMcf/yr	PTC No. 077-00006,	5.19

Permit Limits / Standard Summary

5.1 The PM and PM_{10} emissions shall not exceed 1.33 lb/hr and 5.83 T/yr.

[PTC No. 077-00006, 9/20/00]

5.2 The SO_2 emissions shall not exceed 0.11 lb/hr and 0.46 T/yr.

[PTC No. 077-00006, 9/20/00]

5.3 The NO_x emissions shall not exceed 7.00 lb/hr and 30.7 T/yr.

[PTC No. 077-00006, 9/20/00]

5.4 The NO_x emissions shall not exceed 0.04 lb/MMBtu.

[40 CFR 60.44b(a)(1); PTC No. 077-00006, 9/20/00]

5.5 The VOC emissions shall not exceed 0.96 lb/hr and 4.22 T/yr.

[PTC No. 077-00006, 9/20/00]

5.6 The CO emissions shall not exceed 14.0 lb/hr and 61.3 T/yr.

[PTC No. 077-00006, 9/20/00]

5.7 The PM from the boiler stack shall not exceed a concentration of 0.015 grains per dry standard cubic foot corrected to 3% oxygen.

[IDAPA 58.01.01.676, 05/01/94; PTC No. 077-00006, 9/20/00]

5.8 For purposes of compliance with Permit Condition 5.9, the NO_x standards in Permit Condition 5.4 apply at all times including periods of startup, shutdown, or malfunction.

[40 CFR 60.44b(h)]

5.9 Compliance with the NO_x emissions limit in Permit Condition 5.4 is determined on a 30-day rolling average basis.

[40 CFR 60.44b(i); PTC No. 077-00006, 9/20/00]

Operating Requirement

5.10 The maximum hourly natural gas throughput of the boiler shall not exceed 0.175 MMcf/hr. The maximum annual natural gas throughput of the boiler shall not exceed 1,533 MMcf/yr).

[PTC No. 077-00006, 9/20/00]

5.11 The boiler shall only use natural gas as fuel.

[PTC No. 077-00006, 9/20/00]

Monitoring and Record-keeping Requirements

5.12 An O&M manual for the boiler and $LoNO_x$ - EGR systems shall remain on site at all times.

[PTC No. 077-00006, 9/20/00]

5.13 The permittee shall install, calibrate, and operate a NO_x CEMS for measuring emissions discharged to the atmosphere and record the output of the system.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.48b(b)]

5.14 The NO_x CEMS shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.48b(c)]

5.15 The one-hour average NO_x emission rates measured by the NO_x CEMS shall be expressed in lb/MMBtu heat input and shall be used to calculate the average 30-day emissions rates under Permit Condition 5.4. The one-hour averages shall be calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate each one-hour average.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.13(b), 48b(d)]

5.16 The NO_x CEMS must meet all requirements set forth in 40 CFR 60.13 (provided in Appendix B).

[PTC No. 077-00006, 9/20/00; 40 CFR 60.13(b), 48b(e)]

5.17 The span value for NO_x CEMS is 500 ppm.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.13(b), 48b(e)(2)]

5.18 When NO_x emissions data is not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data will be obtained by using standby monitoring systems, EPA Method 7, EPA Method 7A, or other approved reference methods to provide emissions data for a minimum of 75% of the operating hours in each steam-generating unit operating day for at least 22 out of 30 successive steam-generating unit operating days.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.13(b), 48b(f)]

5.19 Each operating day, the permittee shall monitor and record the natural gas usage for that day, in MMcf/day. Once per month, the permittee shall record the total natural gas usage for the previous rolling 12-month period, in MMcf/yr.

[PTC No. 077-00006, 9/20/00]

5.20 The permittee shall calculate the emissions of SO_2, CO, and NO_x from the boiler on a monthly basis using AP-42 Section 1.4 (3/98) emission factors, or a DEQ-approved alternative.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

5.21 The permittee shall calculate the annual capacity factor for each calendar quarter, and determine the annual capacity factor based on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.49b(d)]

5.22 The permittee shall maintain the following records for each boiler operating day:

5.22.1 Calendar date

5.22.2 The average hourly NO_x emission rates (expressed as NO_2) measured as lb/MMBtu heat input.

5.22.3 The 30-day average NO_x emission rate (lb/MMBtu heat input) calculated at the end of each boiler operating day from the measured hourly NO_x emission rates for the preceding 30 boiler operating days.

5.22.4 Identification of the boiler operating days when the calculated 30-day average NO_x emissions rates are in excess of the NO_x emissions standards in Permit Condition 5.3 and 5.4, with the reasons for such excess emissions as well as a description of corrective actions taken.

5.22.5 Identification of the boiler operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

5.22.6 Identification of the times when emissions data have been excluded from the calculation of average emissions rates and the reasons for excluding data.

5.22.7 Identification of "F" factor used for calculations, method determination, and type of fuel combusted. An "F" factor is the ratio of the gas volume of the products of combustion to the heat content of the fuel.

5.22.8 Identification of the times when the pollutant concentration exceeded the full span of the CEMS.

5.22.9 Description of any modifications to the continuous emissions monitoring system that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.

5.22.10 Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR 60, Appendix F, Procedure 1.

5.22.11 The number of hours of operation of the boiler.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.49b(g) et al; IDAPA 58.01.01.06, .07, 5/1/94]

Reporting

5.23 The permittee shall submit a quarterly report containing the information recorded under Permit Condition 5.22. All quarterly reports shall be postmarked within 30 days following the end of each calendar quarter.

[PTC No. 077-00006, 9/20/00; 40 CFR 60.49b(i)]

6. EMISSIONS UNIT GROUP 4: BABCOCK AND WILCOX BOILER

Summary Description

The following is a narrative description of the Babcock and Wilcox boiler regulated in this Tier I operating permit. This description is for informational purposes only.

The boiler is equipped with a COEN QLN, low NO_x spud-type burner. The boiler has a design capacity of 58,000 lb of steam per hour and a burner capacity of 63.8 million Btu/hr.

Table 6.1 specifies the emissions point related to the emissions unit.

Table 6.1 EMISSIONS UNIT AND POINT

Source ID	Emissions Unit	Emissions Control Device	Emission Point
1002.0	Babcock and Wilcox boiler	N/A	Boiler stack

Table 6.2 contains only a summary of the requirements that apply to the Babcock and Wilcox boiler. Specific permit requirements are listed below Table 6.2.

Table 6.2 SUMMARY OF EMISSIONS LIMITS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
6.1	PM	0.64 lb/hr, 2.79 T/yr	PTC No. 077-00006	6.8 to 6.13
6.2	PM_{10}	0.32 lb/hr, 1.40 T/yr	PTC No. 077-00006	6.8 to 6.13
6.3	SO_2	0.04 lb/hr, 0.17 T/yr	PTC No. 077-00006	6.8 to 6.13
6.4	NO_x	2.88 lb/hr, 12.63 T/yr	PTC No. 077-00006	6.8 to 6.13
6.5	CO	11.7 lb/hr, 51.1 T/yr	PTC No. 077-00006	6.8 to 6.13
6.6	VOC	0.19 lb/hr, 0.84 T/yr	PTC No. 077-00006	6.8 to 6.13
6.7	PM	0.015 gr/dscf corrected to 3% oxygen	IDAPA 58.01.01.676	None
6.9	Fuel usage	559 MMcf/yr	PTC No. 077-00006	6.10, 6.11

Permit Limits / Standard Summary

6.1 The PM emissions from the boiler exhaust stack shall not exceed 0.64 lb/hr and 2.79 T/yr.
[PTC No. 077-00006, 06/16/95]

6.2 The PM_{10} emissions from the boiler exhaust stack shall not exceed 0.32 lb/hr and 1.40 T/yr.
[PTC No. 077-00006, 06/16/95]

6.3 The SO_2 emissions from the boiler exhaust stack shall not exceed 0.04 lb/hr and 0.17 T/yr.
[PTC No. 077-00006, 06/16/95]

6.4 The NO_x emissions from the boiler exhaust stack shall not exceed 2.88 lb/hr and 12.63 T/yr.

[PTC No. 077-00006, 06/16/95]

6.5 The CO emissions from the boiler exhaust stack shall not exceed 11.7 lb/hr and 51.1 T/yr.

[PTC No. 077-00006, 06/16/95]

6.6 The VOC emissions from the boiler exhaust stack shall not exceed 0.19 lb/hr, and 0.84 T/yr.

[PTC No. 077-00006, 06/16/95]

6.7 Particulate emissions from the boiler stack shall not exceed a concentration of 0.015 grains per dry standard cubic foot corrected to 3% oxygen.

[IDAPA 58.01.01.676, 05/01/94]

Operating Requirement

6.8 The Babcock and Wilcox boiler shall only use natural gas as fuel.

[PTC No. 077-00006, 06/16/95]

6.9 The Babcock and Wilcox boiler shall not burn more than 559,000,000 cf of natural gas per year.

[PTC No. 077-00006, 06/16/95]

Monitoring and Record-keeping Requirements

6.10 The permittee shall record and maintain records of the amounts of natural gas combusted during each day.

[PTC No. 077-00006, 06/16/95; 40 CFR 60.48c(g); 40 CFR 60.48c(i); IDAPA 58.01.01.322.06, 07, 5/1/94]

6.11 The permittee shall record the cumulative volume of natural gas fuel consumed by the Babcock and Wilcox boiler on a monthly basis. The permittee shall record the total natural gas usage in MMcf per rolling 12-month period. The records shall be kept on site for at least five years and shall be made available to DEQ representatives upon request.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

6.12 The permittee shall calculate the emissions of SO_2, CO, and NO_x from the boiler on a monthly basis using AP-42 Section 1.4 (3/98) emission factors, or a DEQ-approved alternative.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Reporting

6.13 The permittee shall comply with 40 CFR 60.7, as contained in Appendix B, for notification and record-keeping requirements.

[40 CFR 60.7]

7. EMISSIONS UNIT GROUP 5: GRANULATION NO. 1 PROCESS

Summary Description

The following is a narrative description of the Granulation No. 1 process regulated in this Tier I operating permit. This description is for informational purposes only.

Ammonia, phosphoric acid, gypsum, and sulfuric acid are mixed in a reactor to form a slurry. This slurry is then mixed with recycled fine product in a granulator where the slurry coats the outside of the recycled product to increase the particle size. The granulated product is then dried and screened. The oversized material is crushed and recycled with the fine product. The intermediate fraction is the final product, which is cooled and conveyed to storage. In the storage building, the final product is transferred by front-end loader to a transfer conveyor, which feeds the product transfer system. The product transfer system then loads trucks and/or railcars.

Table 7.1 describes the emissions points related to each emissions unit of the Granulation No. 1 process and the devices used to control emissions.

Table 7.1 EMISSIONS UNITS, CONTROL DEVICES, AND POINTS

Emissions Point Identification	Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
400.0	Dryer granulation No.1 baghouse (and cooler baghouse) stack	Dryer scrubber	Granulation No. 1 dryer stack
401.0	Granulator	Reactor/granulator scrubber	Granulation No. 1 reactor/ granulator stack
403.0	Reactor		
406.0	Cooler	Cooler baghouse	Dryer burner
407.1	Polishing screen	Granulation No. 1 baghouse	Granulation No. 1 baghouse stack
411.1	Fines drag		
412.1	Elevator to granulator		
413.1	Elevator to screens		
414.2	Reject conveyor to fines drag		
419.0	Product dump from overhead	Reasonable control of fugitive emissions (enclosure)	Fugitive
420.0	Front-end loader operation		
421.0	Underground conveyor		
422.0	Elevator		
423.0	Crossover belt		
423.1	Screens for crossover belt		
424.0	Bulking loadout		

Table 7.2 contains only a summary of the requirements that apply to the Granulation No. 1 process. Specific permit requirements are listed below Table 7.2.

Table 7.2 SUMMARY OF EMISSIONS LIMITS AND REQUIREMENTS

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
7.1	PM	23.8 lb/hr, 104.26 T/yr (all stacks combined) Process weight rate (all stacks combined)	Tier II Permit No. 077-00006 IDAPA 58.01.01.702	7.11 to 7.13, 7.18
7.2	PM_{10}	19.52 lb/hr, 85.48 T/yr (all stacks combined)	Tier II Permit No. 077-00006	7.11 to 7.13, 7.18
7.3	Fluorides	7.8 lb/hr, 34.16 T/yr	Tier II Permit No. 077-00006	7.10, 7.14, 7.15, 7.16, 7.17, 7.19, 7.23 to 7.27
		0.060 lb total fluoride/T equivalent P_2O_5 feed (all stacks combined)	40 CFR 63.622(a)	
7.4	NO_x	1.44 lb/hr, 6.3 T/yr (all stacks combined)	Tier II Permit No. 077-00006	7.20, 7.21
7.5	CO	0.37 lb/hr, 1.6 T/yr (all stacks combined)	Tier II Permit No. 077-00006	7.20, 7.21
7.6	SO_2	0.004 lb/hr, 0.019 T/yr (all stacks combined)	Tier II Permit No. 077-00006	7.20, 7.21
7.7	PM fugitives	7.03 lb/hr, 30.78 T/yr	Tier II Permit No. 077-00006	7.22
7.8	PM_{10} fugitives	2.54 lb/hr, 11.12 T/yr	Tier II Permit No. 077-00006	
7.9	Fluoride fugitives	0.070 lb/hr, 0.308 T/yr	Tier II Permit No. 077-00006	

Permit Limits / Standard Summary

7.1 The permittee shall comply with the following PM emission limits:

7.1.1 The total PM emissions from the combined Granulation No. 1 process stacks shall not exceed 23.8 lb/hr, and shall not exceed 104.26 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

7.1.2 Based on the process weight rate equation the limit is 25.6 lb/hr. Because Permit Condition 7.1.1 is more stringent, compliance with Permit Condition 7.1.1 shall be deemed compliance with Permit Condition 7.1.2.

[IDAPA 58.01.01.702, 4/5/00]

7.2 The PM_{10} emissions from the combined Granulation No. 1 process stacks shall not exceed 19.52 lb/hr, and 85.48 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

7.3 The permittee shall comply with the following emission limits for total fluoride:

7.3.1 Total fluoride emissions from the combined Granulation No. 1 process stacks shall not exceed 7.8 lb/hr and 34.16 T/yr. The ton-per-year emissions limit shall be determined by multiplying the actual, or allowable (if actual is not available), pound-per-hour emission rate by the actual hours per year the process(es) venting to this stack operate(s).

[Tier II Permit No. 077-00006, 12/3/99]

7.3.2 On and after the date on which the performance test required to be conducted by 40 CFR 63.7 and Permit Condition 7.19 must be completed, no owner or operator subject to the provisions of 40 CFR 63, Subpart BB shall cause to be discharged to the atmosphere from any affected source any gases which contain total fluorides in excess of 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/T).

[40 CFR 63.622(a)]

7.4 The NO_x emissions from the combined Granulation No. 1 process stacks shall not exceed 1.44 lb/hr and 6.3 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

7.5 The CO emissions from the combined Granulation No. 1 process stacks shall not exceed 0.37 lb/hr and 1.6 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

7.6 The SO_2 emissions from the combined Granulation No. 1 process stacks shall not exceed 0.004 lb/hr and 0.019 T/yr.

[Tier II Permit No. 077-00006, 12/3/99]

7.7 Fugitive PM emissions from the Granulation No. 1 process shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651, and shall not exceed 7.03 lb/hr and 30.78 T/yr.

[IDAPA 58.01.01.650-651, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

7.8 Fugitive PM_{10} emissions from the Granulation No. 1 process shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651, and shall not exceed 2.54 lb/hr and 11.12 T/yr.

[IDAPA 58.01.01.650-651, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

7.9 Fugitive fluoride emissions from the Granulation No.1 process shall be reasonably controlled, as required in IDAPA 58.01.01.650 and 651, and shall not exceed 0.070 lb/hr and 0.308 T/yr.

[IDAPA 58.01.01.650-651, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

Operating Requirements

7.10 On or after the date on which the performance test required to be conducted by 40 CFR 63.7 and Permit Condition 7.19 is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of 7.17(1) or (2).

[40 CFR 63.624]

7.11 Maintenance to the scrubbers and/or process maintenance shall be performed if visible emissions from the scrubber stacks exceed 15% opacity. A record of maintenance shall be maintained on site for the most recent five years and shall be made available to DEQ representatives upon request.

[Tier II Permit No. 077-00006, 12/3/99]

7.12 Maintenance to the baghouse shall be performed if visible emissions from the baghouse stack exceed 10% opacity. A record of maintenance shall be maintained on site for the most recent five years and shall be made available to DEQ representatives upon request.

[Tier II Permit No. 077-00006, 12/3/99]

Monitoring, Compliance Tests, and Compliance Provisions

7.13 The permittee shall monitor the pressure drop across the baghouse to ensure control of PM and PM_{10}. The pressure drop shall be recorded weekly.

[Tier II Permit No. 077-00006, 12/3/99; IDAPA 58.01.01.322.06, 5/1/94]

7.14 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of 40 CFR 63, Subpart BB shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5% over its operating range.

[40 CFR 63.625(a)]

7.15 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of 40 CFR 63, Subpart BB shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flow rate which meets the requirements of paragraph (a) of this section and then by proceeding according to Permit Condition 7.19.3(3).

[40 CFR 63.625(b)]

Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

[40 CFR 63.625(c)]

7.17 Following the date on which the performance test required in Permit Condition 7.19 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in 40 CFR 63, Subpart BB must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20% of the baseline average value determined as a requirement of Permit Condition 7.19.3(4). The Administrator retains the right to reduce the ±20% adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but in no instance shall the adjustment be reduced to less than #10%. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to Permit Condition 7.25(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with 40 CFR 63, Subpart BB. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in Permit Condition 7.19.3(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in 40 CFR 63, Subpart BB and established in the manner required in Permit Condition 7.19.3(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[40 CFR 63.625(f)]

7.18 PM and PM_{10} Compliance Test

7.18.1 The permittee shall conduct compliance tests within 12 months of, or 12 months prior to, December 24, 2002 to demonstrate compliance with the PM and PM_{10} hourly emissions limits in Permit Conditions 7.1 and 7.2. After the first compliance test, the permittee shall conduct a compliance test once per annum to demonstrate compliance with hourly PM and PM_{10} emissions limits in Permit Conditions 7.1 and 7.2.

During calendar years 2003, 2004, and 2005, compliance with the PM_{10} emissions limit in Permit Condition 7.2 shall be determined by conducting a Method 5 performance test on the dryer stack, the reactor/granulator stack, and the baghouse stack. The PM_{10} fraction of the PM emission rate determined during the test shall be determined by multiplying the PM emission rate by a 0.82 conversion factor.

During calendar years 2004 and 2005, Method 201A and 202 performance tests shall be conducted on the baghouse stack in addition to the Method 5 test. During calendar years 2004 and 2005 Method 5 and 202 performance tests shall be conducted on the dryer stack and reactor/granulator stack in addition to the Method 5 test. All performance testing shall be conducted in accordance with Permit Condition 2.16.

No later than September 30, 2005, Simplot shall submit a permit application to revise the PM_{10} emissions limits to reflect the results of the Method 201A and 202, and Method 5 and 202 performance tests. The permit application shall contain justification for each emission limit proposed. Once DEQ issues a permit with revised PM_{10} emissions limits, compliance with Permit Condition 7.2 shall be determined by source testing using Methods 201A and 202 on the baghouse stack and Methods 5 and 202 on the dryer stack and reactor/granulator stack..

7.18.2 The permittee shall record the equivalent P_2O_5 feed rate to the process, the pressure drop across the baghouse, the pressure drop across each scrubber, and the flow rate of the scrubber liquid to each scrubber during compliance tests.

7.18.3 The permittee shall conduct a visible emissions evaluation during each performance test. The visible emissions evaluation shall be conducted in accordance with the procedures contained in IDAPA 58.01.01.625.

[IDAPA 58.01.01.322.06, 5/1/94; Tier II Permit No. 077-00006, 12/3/99]

7.19 Total Fluoride Compliance Test

7.19.1 On or before the applicable compliance date in Permit Condition 7.27 and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of 40 CFR 63, Subpart BB shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63,Subpart A and in this section.

[40 CFR 63.626(a)(1)]

7.19.2 In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A, or other methods and procedures as specified in this section, except as provided in 40 CFR 63.7(f).

[40 CFR 63.626(b)]

7.19.3 Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line shall determine compliance with the applicable total fluorides standards in Permit Condition 7.3.2, as follows.

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) \Big/ (PK)$$

Where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).
Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR Part 60, Appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13 B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in Sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

Where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

(i) The accountability system described in Permit Conditions 7.14 and 7.15 shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P_2O_5 content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference - see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus - P_2O_5 or $Ca_3(PO_4)_2$, Method A - Volumetric Method.

(C) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method B - Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method C - Spectrophotometric Method.

(E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method A - Volumetric Method.

(F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method B - Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C - Spectrophotometric Method.

(4) To comply with Permit Conditions 7.17(1) or (2), the owner or operator shall use the monitoring systems in Permit Condition 7.16 to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of Permit Condition 7.17(1) or (2).

[40 CFR 63.626(c)]

7.20 For the purposes of determining compliance with the short-term (lb/hr) and yearly (tons-per-year) emission limits for the pollutants NO_x, CO, and SO_2 in Permit Conditions 7.4, 7.5, and 7.6, the permittee shall continuously monitor the amount of natural gas fired in the dryer. On a monthly basis, the permittee shall record the monthly natural gas consumption of the dryer, the monthly operating hours of the dryer, and the rolling 12-month natural gas usage.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

7.21 For the purpose of determining compliance with the short-term (lb/hr) and yearly (tons-per-year) emission limits for NO_x, CO, and SO_2 in Permit Conditions 7.4, 7.5, and 7.6, the permittee shall calculate the monthly and rolling 12-month emission rate using AP-42 Section 1.4 (3/98) emission factors for natural gas combustion, or a DEQ-approved alternative, on a monthly basis.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.01, 3/19/99]

7.22 The permittee shall demonstrate compliance with the PM, PM_{10}, and fluoride fugitive emissions limits in Permit Conditions 7.7, 7.8, and 7.9 using the emission factors specified in Appendix D of J.R. Simplot's June 29, 2000 Tier I/II application, or a DEQ-approved alternative method.

[IDAPA 58.01.01.650-651, 5/1/94; IDAPA 58.01.01.322.06, 07, 5/1/94]

Record-keeping and Reporting Requirements

7.23 Each owner or operator subject to the requirements of 40 CFR 63, Subpart BB shall comply with the notification requirements in 40 CFR 63.9, as contained in Appendix A.

[40 CFR 63.627(a)]

7.24 Each owner or operator subject to the requirements of 40 CFR 63, Subpart BB shall comply with the record-keeping requirements in 40 CFR 63.10, as contained in Appendix A.

[40 CFR 63.627(b)]

7.25 The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

(1) Performance test report. As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

(2) Excess emissions report. As required by 40 CFR 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in 40 CFR 63.10.

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1% of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1% or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

[40 CFR 63.627(c)]

7.26 The owner or operator shall comply with the requirements of the general provisions in 40 CFR Part 63, Subpart A as shown in Appendix A to 40 CFR Part 63, Subpart BB. Requirements are included in Appendix A of this permit.

[40 CFR 63.628]

7.27 Each owner or operator of an existing affected source at a phosphate fertilizer production plant shall achieve compliance with the requirements of 40 CFR 63, Subpart BB no later than June 10, 2002. Notwithstanding the requirements of 40 CFR 63.7(a)(2)(iii), each owner or operator of an existing affected source at a phosphate fertilizer production plant shall fulfill the applicable requirements of Permit Condition 7.19 no later than June 10, 2002.

[40 CFR 63.630(a)]

Exemption From New Source Performance Standards.

7.28 Any affected source subject to the provisions of 40 CFR 63, Subpart BB is exempted from any otherwise applicable new source performance standard contained in 40 CFR, Part 60, Subpart V, Subpart W, or Subpart X. To be exempt, a source must have a current operating permit pursuant to Title V of the CAA and the source must be in compliance with all requirements of 40 CFR 63. For each affected source, this exemption is effective upon the date the owner or operator demonstrates to the Administrator that the requirements of Permit Conditions 7.10, 7.14, 7.15, 7.16, 7.17, and 7.19 have been met.

[40 CFR 63.631]